

Method and Apparatus for Packaging Optical Fiber Sensors for Harsh Environments

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ABSTRACT OF THE DISCLOSURE

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A package for an optical fiber sensor having a metal jacket surrounding the sensor, and heat-shrink tubing surrounding the metal jacket. The metal jacket is made of a low melting point metal (e.g. lead, tin). The sensor can be disposed in a rigid tube (e.g. stainless steel or glass) that is surrounded by the metal jacket. The metal jacket provides a hermetic, or nearly hermetic seal for the sensor. The package is made by melting the metal jacket and heating the heat shrink tubing at the same time. As the heat-shrink tubing shrinks, it presses the low melting point metal against the sensor, and squeezes out the excess metal.